

the total eclipse of 1878—duly chronicled in the *Daily News* at the time—was one by which Prof. Newcomb demonstrated a tremendous extension of the corona in the direction of the plane of the sun's equator, or very near it. It will be important to see, whether on the present occasion the extension will be so great, especially since Dr. Siemens has thrown down the gauntlet to astronomers by his bold speculations touching the circulation of the solar gases. Such, then, are some of the things which the Eclipse Expedition is going to do, or going to try to do. If all goes well, I shall be able in my next letter to tell your readers something of a definite nature as to the actual camping-ground and the local arrangements in Egypt.

The following telegram from its special correspondent is given in Tuesday's *Daily News* :—

Sohag, Monday

The preparations are complete for the eclipse on Wednesday, thanks to the assistance rendered by the representatives of the Egyptian Government to the English, French, and Italian observers alike. The weather is apparently settled. There is little probability of dust-storms. The greatest heat experienced is 108 in the shade. The temperature is now cooler. The English party will probably return by Carthage, leaving Suez on the 31st.

### ALGÆ<sup>1</sup>

IT is little more than a year since the Latin edition of Dr. Agardh's work on the "Morphology of the Florideæ" was noticed in the pages of NATURE. The author now sends us another contribution to the systematical study of algæ. The present is, however, not a distinct work, but a continuation of a series of Essays or Monographs, the first instalment of which appeared in vol. ix. of the *Transactions* of the University of Lund, in the year 1872. The subjects of the first instalment were the genera *Caulerpa* and *Zonaria*, and the classification and description of the Australian species of certain tribes of *Sargassum*.

The present work consists of essays on the CHORDARIEÆ, and on some of the DICTYOTÆÆ. Although it bears a Swedish title, it is written in Latin. It commences with a monograph of the family Chordarieæ, which is entirely reconstructed, and is enlarged by the introduction of several new genera. Under the present arrangement it comprises seventeen genera.

From the increased activity recently shown by British algologists, whose exertions have been rewarded by the discovery of many species of Algæ new to these shores, it would seem desirable to mention more particularly a few of the changes which have been made in the present work by Dr. Agardh in the classification of some of the plants of the olive series of Algæ.

Beginning with *Elachistea*, as the author, restoring the old spelling, prefers to call it, we find that this genus is removed to the CHORDARIEÆ. This is in accordance with the views of Dr. W. H. Harvey, expressed in the "Phyc. Brit. Tit." *E. fucicola*. This genus is especially interesting from the fact that out of the nine species, seven are British. *E. velutina* (of the "Phyc. Brit." pl. xxviii. B), removed by Thuret to *Streblonema*, is placed by Dr. Agardh in his new genus *Herponema* (see p. 55).

The next genus, *Myriocladia*, includes *M. Loveni*, an extremely rare species, which has been obtained growing on oysters in deep water in the Baltic, and which Dr. Agardh ("Sp. Alg.", p. 53) states was found by the late Mr. Borrer on the Sussex coast; it has not, however, been met with by succeeding observers; neither has Dr. Agardh seen the plant in other collections. The name of this rare plant does not occur in the published lists of

Algæ found by Mr. Borrer. A representation, much enlarged, of some of the details of the plant, will be found on Pl. I, Fig. 3.

The genus *Mesogloia* is now restricted to two species, *M. Mediterranea* and *M. vermicularis*. *M. virescens* is removed to *Eudesme*, of which another species inhabits Tasmania and South Australia. *Chordaria divaricata* and *Mesogloia Griffithsiana* are now respectively *Castagnea divaricata* and *C. Griffithsiana*. The observations on the structure and fruit of the epiphytic plants, which constitute the genera *Myrionema* and *Herponema*, will be interesting to British algologists.

Among the new Algæ which have been recently added to the British Marine Flora, is the handsome plant found by Mr. G. W. Traill, in the Firth of Forth, and issued to British collectors under the name of *Dictyosiphon Hippuroides*. The plant was first described and figured by Lyngbye in the "Hydrophytologiæ Danicæ," under the name of *Scytosiphon Hippuroides*; then, in Agardh's "Sp. Gen. et ord. Alg.", vol. i. p. 66, as *Chordaria flagelliformis*, var. *B. Hippuroides*. Areschoug subsequently distributed dried specimens of the plant, and published (*Bot. Notiser*, 1873, No. 6., and *Obs. Phycol.*, iii. 1875) descriptions of it under the name of *Dictyosiphon Hippuroides*. In the present work Dr. Agardh maintains the opinion he had expressed in "Sp. Alg." more than thirty-three years ago, that the *Scyt. Hippuroides* of Lyngbye is a form of *Chord. flagelliformis*, and not a *Dictyosiphon*. He supports his views by a minute description of the structure of the frond, and gives at length (pp. 67-70) his reasons for differing in opinion from his old friend Dr. Areschoug. As a proof of the care with which Dr. Agardh conducted his examination of the plant, it may be mentioned that he describes and names six forms of it, including among them, *Scyt. Hippuroides*, Ll., and *Scyt. tomentosus* of Fl. Dan. and Lyngb. British algologists will find this part of Dr. Agardh's work particularly interesting.

Among the Algæ which have been recently added to the British Marine flora are *Phlæospora tortilis* (Rupr.) Aresc., and *Dict. (Coilonema) mesogloia*, Aresc.; it may be mentioned incidentally that Dr. Agardh considers both *Phlæospora* and *Coilonema* as distinct genera.

The DICTYOTÆÆ.—The author commences with preliminary remarks on the limits of the family, and the structure and fructification of the different genera (pp. 77-83). Then follows an elaborate essay on the genus *Dictyota* (pp. 83-92); and after that a description of the species, and the tribes under which they are arranged. Of the twenty-six species, one only, *D. dichotoma*, is a native of our shores. Six other species are referred to *Dilophus*, J. Ag., and two to *Glossophora*, J. Ag.

The genus *Spatoglossum*, Kg., includes *Taonia Solierii*, T. Schraderi, and two others. Then follow a few observations on *Taonia atomaria*. *Padina* is treated at greater length. To this succeed elaborate observations on the structure and fructification of *Zonaria* (pp. 120-131), and some remarks on certain species. This part of the work, it must be observed, is supplementary to the article on *Zonaria* in the first part of the "Bidrag," p. 45, before referred to, in which the several species are described.

It may here be remarked that the *Zonaria collaris* of the "Phyc. Brit." has no claim to be considered as a native of the British Isles. It is found in the Mediterranean and Adriatic, and occasionally in Granville Bay, on the French coast. It is not a *Zonaria*, but a *Cutleria*.

The work concludes with some observations on the species of *Halyseris*.

In the selection of the preceding subjects for remark, the writer has been guided by the interest which, it was thought, would be taken in them by British algologists; it must, however, be observed that the work has also many points of interest as regards Australia, Tasmania, and New Zealand. Among the species belonging to the

<sup>1</sup> Til Algernes Systematik. Nya bidrag af J. G. Agardh (Andra Afdelningen) Lunds Univ. Årsskrift. Tom. xvii. (4to., pp. 134).

CHORDARIEÆ, sixteen are natives of these colonies; while in Dictyota, Dilophus, and Glossophora, which, together contain thirty-four species, no fewer than fifteen belong to the same localities.

It is almost superfluous to say that the work in every part gives evidence of the careful and patient observation which characterise all the writings of Dr. Agardh, and render them so valuable an aid to the study of algology. It is to be hoped that before long we may have the pleasure of welcoming another instalment of his contributions to the study and classification of the Melanosperms.

M. P. M.

### NOTES

THIS week we give the first of a short series of articles on the life and work of the late Mr. Darwin. The series is under the general care of Dr. G. J. Romanes, F.R.S., who also will take special charge of the Zoology and Psychology. The Geology will be by Prof. Geikie, F.R.S., Director of the Geological Survey, and the Botany by Mr. W. T. Thiselton Dyer, F.R.S.

THE first meeting of the Executive Committee of the Darwin Memorial was held in the rooms of the Royal Society on Tuesday, May 16, at which it was resolved that subscriptions be invited in order to promote such a memorial of the late Mr. Darwin as shall seem most fitting, having regard to the amount that may be collected. Subscriptions will be received by Mr. J. Evans, Treasurer, Royal Society, Burlington House, W.

AT a meeting of Convocation of the University of London held May 9, the following resolution was unanimously passed:—"The Graduates of the University of London, in Convocation assembled, desire to record their sense of the irreparable loss which science and philosophy have sustained in the death of Mr. Darwin, whom they recognise as an acute and patient investigator, an earnest seeker after truth, and an original thinker, whose discoveries have exercised a profound influence upon scientific research and upon the progress of scientific thought throughout the world."

A NOVEL feature at the meeting of Convocation of London University, last week, was the appearance for the first time of female graduates in academical costume. Sir George Jessel, who presided, gave some statistics to show the rapid progress in the numbers availing themselves of the University's examinations, while Sir John Lubbock pointed out the progress that had been made in scientific education during the past year, referring especially to the City Technical Institute. "What is wanted," he said, "is not so much money or men, as method and organisation, and to utilise the resources we already possess." He referred to the wasted resources of Gresham College, which, he said, ought to be "placed on a footing more in accordance than it has been with the wise designs of its noble founder." It was agreed to request the Senate to take definite steps with regard to this fossilised institution.

A WELL-DESERVED baronetcy has been conferred upon the eminent scientific agriculturist, Dr. John Bennet Lawes, F.R.S. The vast services rendered to agriculture by Sir John B. Lawes, in connection with Dr. Gilbert, are well-known. The new baronet, we learn from the *Times*, was born in 1814, and succeeded to his estate at Rothamstead, in Hertfordshire, in 1822. Mr. Lawes was educated at Eton and at Brasenose College, Oxford, where he remained from 1832 to 1835. During his academic career he displayed at once a strong partiality for the laboratory, and on leaving the University, spent some time in London, for the purpose of studying in a practical manner the science of chemistry. Possessed of independent means, a handsome property, and a beautiful old manor-house and demesne,

Mr. Lawes at once interested himself in agriculture. In October, 1834, he first commenced regular experiments in agricultural chemistry on taking possession of his property and home at Rothamstead, and from that date up to the present time Mr. Lawes has unceasingly been applying his scientific knowledge to the solution of questions affecting practical agriculture. Sir John Lawes, we believe, has not only entirely maintained his experimental farm of 500 acres, but has further set apart a sum of 100,000*l.* and certain lands for the convenience of the undergraduates after his death. This is indeed a gift to the nation, a gift, too, which no money value adequately represents.

MR. F. V. DICKINS, M.B., B.Sc., has been appointed Assistant Registrar to the University of London, in succession to Prof. Moseley.

THE second meeting of the Bohemian Naturalists and Physicians will take place at Prague during May 24-30, to celebrate the foundation of a Slav University in that city.

M. COCHERY, the Minister of Postal Telegraphy in France, has printed a circular extending the use of telephones to provincial cities. The charge for telephonic communications in the cities where the government will establish central halls, is 10*¢*, and in the cities where the number of subscribers will exceed 300, the subscription will be reduced to 8*¢* a year. The subscribers will have the right of supplying their own telephones from among those approved by the Government. Special rooms will be fitted up in Paris, as well as in the provinces for telephonic conversations. The charge will be 5*¢* from each interlocutor for each five minutes. The time allowed will not exceed ten minutes if there are other would-be interlocutors waiting. The telegrams received for the subscribers to the telegraphic offices will be telephoned to them if desired. The subscribers will enjoy the privilege of telephoning their letters to the Post Office for immediate despatch, on paying a charge of 5*¢* for each 100 words; this privilege is limited to 200*¢* words, the postage must be paid besides. Telegrams will be received in the same manner and on the same scale.

DURING the last two or three years a bark containing quinine and quinidine has been imported into this country from Columbia in such enormous quantities as to equal or even sometimes exceed the whole of the importations of cinchona bark from all other countries. The botanical source of this bark, which is known in commerce under the name of Cuprea Cinchona, on account of its peculiar coppery tint, has hitherto been a mystery. M. Triana, the well-known quinologist, has recently succeeded in tracing it out, and has stated, in the *Pharmaceutical Journal* for April 22, that it is derived in great measure from two species of the nearly allied genus *Remijia*, none of the members of which were previously known to contain quinine. Several species of *Remijia* have leaves resembling those of the true Cinchonas, and of these M. Triana has determined that *R. Purdieana*, Wedd., and *R. pedunculata*, Karsten, certainly yield Cuprea bark, the former being the species which contains the alkaloid Cinchonamine, recently discovered by M. Arnaud. It appears probable that other species also yield the Cuprea Cinchona of commerce, but definite information on this point is still wanting. The value of this bark has led, according to M. Triana, to great devastation of the forests in which the trees grow, and has produced a financial stagnation, business being neglected in order to follow the more profitable occupation of collecting the bark. Fortunately seeds of the tree have been received and are now in cultivation at Malvern House, Sydenham. The tree is likely to prove valuable for cultivation in countries where malarial fever abounds, since it grows at an elevation of 200-1000 metres above the sea, at which even red Cinchona bark will not flourish.